



International Journal of Advanced Research

ijar.eanso.org

Volume 7, Issue 1, 2024

Print ISSN: 2707-7802 | Online ISSN: 2707-7810

Title DOI: <https://doi.org/10.37284/2707-7810>



EAST AFRICAN
NATURE &
SCIENCE
ORGANIZATION

Original Article

Student Gender and Support by Compassion International Influences Achievement Goal Orientation among Adolescents in South-western Uganda

Eunice Ndyareeba^{1*}, Zanna Clay², Judith Biirah³ & Henry Kasawo Kibedi¹

¹ Kyambogo University, P. O. Box 1, Kyambogo, Uganda.

² Durham University, Durham DH1 3LE, UK.

³ Kabale University, P. O. Box 317, Kabale - Uganda.

* Author for Correspondence ORCID ID: <https://orcid.org/0000-0002-3442-0826>; Email: emurokore@kab.ac.ug

Article DOI: <https://doi.org/10.37284/ijar.7.1.2161>

Publication Date: ABSTRACT

30 August 2024

Keywords :

*Achievement Goal
Orientation,
Adolescent Students,
Compassion Support
Beneficiaries,
Mastery Approach,
Mastery Avoidance,
Performance Approach,
Performance Avoidance,
Non- Beneficiaries.*

The adoption of achievement goal orientation is a crucial factor in shaping an individual's attitudes and behaviours towards learning. The aim of this study was to investigate the impact of gender and support from Compassion International on the adoption of achievement goal orientation (AGO). The study used parallel mixed methods approach to sample 510 adolescent students aged 12 -21 years were included in the study. Both Compassion International support beneficiaries and non-beneficiaries were recruited for the study. The Mann-Whitney Test for Differences yielded statistically significant findings regarding the adoption of achievement goal orientation in relation to gender and support from Compassion International. Mann-Whitney U Test was used because it was suitable for comparing overall distribution of participants across gender and Compassion International support since the numbers of respondents within each of the two categories were not uniformly distributed. The adoption of mastery approach (MAP) and performance avoidance goals (PAV) was found to be predicted by Gender, whereas mastery goals (approach and avoidance) and performance approach goals (PAP) were predicted by support from Compassion International. The findings of the study offer valuable insights into the possible gender-based discrepancies in achievement goals orientation and underscore the significance of compassion support in promoting achievement goal orientation that results in self-skill enhancement. This information can serve as a valuable resource for educators, parents, and policymakers in formulating effective approaches that tackle gender-based disparities as well as integrating external support initiatives by non-governmental organisations within the educational framework to foster fair and enduring educational outcomes.

APA CITATION

Ndyareeba, E. Z., Clay, Z., Biirah, J. & Kibedi, H. K. (2024). Student Gender and Support by Compassion International Influences Achievement Goal Orientation among Adolescents in South-western Uganda *International Journal of Advanced Research*, 7(1), 213-230. <https://doi.org/10.37284/ijar.7.1.2161>

CHICAGO CITATION

Ndyareeba, Eunice, Zanna Clay, Judith Biirah and Henry Kasawo Kibedi. 2024. "Student Gender and Support by Compassion International Influences Achievement Goal Orientation among Adolescents in South-western Uganda". *International Journal of Advanced Research* 7 (1), 213-230. <https://doi.org/10.37284/ijar.7.1.2161>.

HARVARD CITATION

Ndyareeba, E. Z., Clay, Z., Biirah, J. & Kibedi, H. K. (2024) "Student Gender and Support by Compassion International Influences Achievement Goal Orientation among Adolescents in South-western Uganda". *International Journal of Advanced Research*, 7(1), pp. 213-230. doi: 10.37284/ijar.7.1.2161.

IEEE CITATION

E. Z., Ndyareeba, Z., Clay, J., Biirah & H. K. Kibedi "Student Gender and Support by Compassion International Influences Achievement Goal Orientation among Adolescents in South-western Uganda", *IJAR*, vol. 7, no. 1, pp. 213-230, Aug. 2024.

MLA CITATION

Ndyareeba, Eunice, Zanna Clay, Judith Biirah & Henry Kasawo Kibedi. "Student Gender and Support by Compassion International Influences Achievement Goal Orientation among Adolescents in South-western Uganda". *International Journal of Advanced Research*, Vol. 7, no. 1, Aug. 2024, pp. 213-230, doi:10.37284/ijar.7.1.2161

INTRODUCTION

Achievement goal orientation, which refers to the ways in which individuals approach and engage in learning tasks, has been found to be a significant predictor of academic success (Ng'ang'a, 2018). Specifically, a study conducted among Kenyan adolescents found out that achievement goal orientation was positively related with high academic achievement while avoidance goal orientation was negatively associated with academic achievement (Ireru et al., 2021). The achievement goals orientation of students might vary significantly depending on gender and available support in one's environment (Ireru et al., 2021). Gender variation has specifically been one of the crucial variables that can portray achievement goal orientation adoption (Şahin & Kürkçü, 2016). However, there is a dearth of research on achieving goal orientations among adolescents in the Ugandan cultural setting.

Compassion International organisation has a global presence, with operations spanning across numerous countries, including Uganda ((NSDFA, 2018)). Since 1980, it has been actively engaged in helping children and their respective communities in the region. Their job entails collaborating with churches, communities, households, and educational institutions to assist children in breaking away from the poverty cycle. The organisation puts particular emphasis on education, health, and holistic welfare. Since 1993, Compassion International has established child development centres in the south-western

region of Uganda, and places education at the forefront of its efforts to disrupt the perpetuation of poverty. Their efforts facilitate children's access to quality education by offering financial assistance for school fees and providing scholastic materials. Compassion International also offers mentorship programmes to assist children in managing emotional difficulties and fostering a constructive self-concept.

The objective of Compassion International is to establish enduring and sustainable transformations in the lives of disadvantaged children and their families by collaborating with local organisations and communities (Mugisha, 2021). One of the pathways to the realisation of their objective necessitates the provision of scientific evidence concerning the dynamics of educational motivation of the beneficiaries.

Achievement goal orientation was initially conceptualized as mastery or performance goal orientation (Dweck & Leggett, 1988 cited in (Nazarieh, 2015)). Researchers later advanced a trichotomous model which included mastery, performance approach, and performance avoidance, and a 3x2 achievement goal orientation model which splits task-oriented competence and self-oriented competence within the mastery goals in a single rubric (Elliot et al., 2011). Then a 2x2 model which separates mastery and performance goals into approach and avoidance as; mastery-approach and mastery-avoidance; performance-approach and

performance-avoidance (Lochbaum et al., 2016; Üztemur, 2020).

Mastery approach orientation is where individuals are motivated by the desire to learn, understand, develop competence and acquire knowledge for self-skill enhancement (Harackiewicz & Elliot, 1993). Students who are inclined to mastery approach goal orientation strive for personal growth, improvement, and mastery of the task or subject matter. Performance approach orientation is where individuals are primarily motivated by the desire to demonstrate their competence through outperforming others. They focus on achieving positive evaluations, recognition, and social comparison while they pursue their education goals. Their goal is to demonstrate their ability and receive favourable judgments from others (Elliot & McGregor, 2001).

Mastery avoidance orientation refers to individuals who are motivated to avoid demonstrating a lack of competence or inability. They are concerned about failure and tend to focus on avoiding mistakes, criticism, or negative evaluations. Their primary goal is to prevent the perception of incompetence or failure so they will choose what they deem as simpler academic tasks in which they can demonstrate competence. Performance avoidance orientation refers to individuals who are primarily motivated to avoid negative evaluations, criticism, or failure escalating from their inability to outperform their peers (Elliot & Harackiewicz, 2015). They are concerned about how others might negatively judge their performance, and their goal is to avoid appearing as academic failures compared to their peers.

The current study adopted the 2x2 goal orientation model because recent research has found out that the 2x2 model yielded better results in predicting students learning engagement (surface and deep learning) when the two models were compared (Üztemur, 2020). The 2x2 model has been successfully adopted in studies done in learning environments in contexts within developing countries like Kenya whose learning context is similar to Uganda (Ng'ang'a, 2018). In

fact, a 2x2 achievement goal orientation model was developed by Elliot and McGregor to explain students' motivations to objective goal setting towards learning (Elliot & McGregor, 2001). In the Ugandan education contexts, students' motivation to engage in learning can be derived from the desire to master content in order to pursue careers that can lead to quick employment due to poverty related pressure. On the other hand, some Ugandan students engage in academic tasks which they deem simple while they avoid those they deem difficult in order to avoid being branded as incompetent or academically weak students as such may hinder their opportunity to be funded for further education. Therefore, any academic task that may prevent them from long term rewards attained through academic success are avoided. Therefore, the 2x2 goal orientation model is appropriate in explaining achievement goal orientation preferences among adolescent students in Southwestern Uganda.

Students adopt four categories of achievement goals, including mastery-approach (MAP), performance-approach goals (PAP), mastery avoidance goals (MAV), and performance-avoidance (PAV) goals (Elliot & Harackiewicz, 2015). These goals are used to approach success or avoid failure in accordance with social or personal standards (Poortvliet, 2020). Students inclined to mastery approach goals (MAP) realise their academic goal achievement by knowledge and skill acquisition for the purposes of mastering academic tasks and developing higher self-competence. The performance approach goals (PAP) focus on demonstrating one's skills in comparison to other students. Mastery avoidance goals (MAV) involve students tending to avoid situations where they might not be able to learn the material or master the tasks. Finally, performance avoidance goals (PAV) focus on demonstrating one's skills to avoid unfavourable judgments about one's competence in comparison with their counterparts. It has been argued that students who adopt mastery goals will focus their attention on the learning process to attain competence whereas students who adapt performance goals will focus on learning outcome

as they strive to outperform their counterparts at any given academic task (Duchesne et al., 2019). This study focused on Compassion International (a renowned Christian non-profit organisation that offers holistic assistance to underprivileged children) support beneficiaries and non-beneficiaries. The study aimed at examining achievement goal orientation adoption as a function of gender and compassion international support among adolescents in secondary schools in Uganda. Achievement Goal Orientation and Learning Outcomes

Achievement goal orientation has been identified as one of the constructs that explains students' approaches to learning as they get engrossed into academic content to achieve their educational goals (Alhadabi & Karpinski, 2020). Yeh and colleagues found out that achievement goal orientation had a direct pivotal impact on expected learning outcome among undergraduate and graduate students in Texas (Yeh et al., 2019). Research conducted among Turkish students in higher education institutions (HEIs) stipulate that achievement goal orientation predicted both surface and deep learning (Soyer & Kirikkanat, 2019). Different dimensions of achievement goals orientation have been linked to learning outcomes. Specifically, performance approach goals were associated with deep learning while performance avoidance goals were associated with surface learning. For example, according to a study conducted among adolescents in Kenya, approach achievement goals orientation were significantly positively correlated with academic success, while avoidance achievement goals orientation was significantly negatively associated with academic success (Ireru et al., 2021). A study conducted among university students in the USA, found out that mastery approach goals (MAP) orientation was positively associated with student academic performance (Alhadabi & Karpinski, 2020).

Achievement Goal Orientation and Gender

Research has shown that there are gender differences in achievement goal orientation (Wang & Degol, 2017). Generally, boys tend to

have a more performance-oriented goal orientation, which means they focus on demonstrating their ability and outperforming others. Girls, on the other hand, tend to have a more mastery goals orientation, which means they focus on developing their own skills and knowledge. Opposed to the Wang and Degol's results, a study done among Kenyan adolescents found that more boys adopted mastery approach goals compared to girls while more girls adopted performance approach and performance avoidance goals (Ng'ang'a, 2018).

Achievement goal orientation adoption among adolescents in secondary schools is a complex topic that necessitates investigation in different contexts. Though considerable research has been done on achievement goal orientation concept among secondary school adolescents, the population in non-Westernised low-income countries is underrepresented (Henrich et al., 2010). So conclusions and interventions suggested from the existing research may not address variations in achievement goal orientation in the context of low income countries like Uganda. Moreover, in low-income countries, students face numerous challenges that can further negatively affect their motivation and achievement orientation. In particular, South-western Uganda is one of densely populated areas with majority youth that face various challenges including financial constraints and other psychological and cultural factors that impact their education pursuit (Nyakato et al., 2021). Despite its complexity and importance, there is barely any literature that addresses gender variation, compassion international support and achievement goal orientation among adolescent students in secondary schools in South-western Uganda.

Compassion is an NGO that supports over 800 adolescents from low socio-economic backgrounds to access quality secondary school education in South-western Uganda despite their poverty related challenges (Mugisha, 2021). Though the main approach compassion international uses to eliminate poverty is through

education and emotional support for children from disadvantaged backgrounds, no research has been made to examine whether there are variations in the way compassion support beneficiaries and non-beneficiaries adopt achievement goals in secondary schools in South-western Uganda.

Therefore, examining the relationship between achievement goal orientation, gender, and compassion international support among secondary school adolescent students in Uganda is useful for understanding how gender and support within low-income settings influence students' motivation and achievement orientation. This knowledge can help educators and policymakers develop strategies to support and enhance academic achievement in low-income contexts. Drawing from empirical literature, as well as the specific Ugandan cultural context where there are disparities in gender roles; boys trained to be brave, win and lead whereas girls are trained to master skills of different forms necessary for their lifelong responsibilities in nurturing children and spouses. In this study we expected that there would be a significant difference between girls and boys regarding achievement goal orientations adoption. Receiving compassion support is not limited to finances but also mentorship and goal setting training among others. Despite the poverty related adversity experienced by children and adolescents from low-income countries, it is expected that once a person receives support, they are more likely to find purpose hence adopting positive goals. This study therefore predicted that, there would be a significant difference in the adoption of achievement goal orientations between compassion-supported and non-compassion-supported adolescents in secondary schools in South-western Uganda.

This study further conducted in-depth interviews among key informants regarding what could influence achievement goals orientation adoption among compassion support beneficiaries and non-beneficiaries in secondary schools in South-western Uganda. By integrating the qualitative data with the quantitative findings, this study

provides more comprehensive understanding of the complex interplay between gender, compassion support and achievement goal adoption. The qualitative findings provide a deeper understanding of the mechanisms and contextual factors that contribute to the significant differences observed in the quantitative results regarding the effect of gender and compassion support on achievement goals orientation adoption within low resource education settings.

The use of mixed methods was adopted based on a pragmatic research philosophy that employs both quantitative and qualitative research approaches, data collection strategies, sampling techniques and data analysis (Gunasekare, 2015). A cross-sectional survey research design and correlational design was used (Kaushik & Walsh, 2019). Creswell and Poth (2018) stipulate that employment of mixed approaches encourage complementarities (i.e., overlapping or divergent points of view), facilitate understanding of achievement goal orientation adoption beyond mere categorisation. As a result, the validity, interpretation, and illustration of the main findings were strengthened.

Methodology

Design

The study employed a cross-sectional survey design and a correlational design. The study adopted a convergent-parallel mixed methods approach and followed the QUAN + qual technique. The concurrent timing during the same phase prioritized the methods equally and kept the strands independent. The choice of the design was based on Almalki, (2016) who affirm that qualitative and quantitative approaches yield different information often detailed views of participants qualitatively and scores on instruments quantitatively which makes the study rich. As suggested by Creswell and Poth, the employment of mixed approaches encouraged complementarities (i.e., overlapping or divergent points of view), facilitated development beyond single method findings (Creswell & Poth, 2018).

Population

The study population for the quantitative survey was derived from two secondary schools that collaborate with Compassion International to enable unprivileged children to access education in Kabale district, rural South-western Uganda. Based on Morgan's table for sample determination (Bukhari, 2021), 510 adolescent students (188 compassion-support beneficiaries and 322 non-beneficiaries) between 11 and 21 years were selected using systematic random sampling. Due to the effect of Covid-19 lockdown, most adolescents were much older than the expected age categories for students in senior one to five, so instead of considering the age category of 12-19 as earlier planned, the researchers considered 11-21 years. The inclusion of adolescents in the aforementioned age category was **hinged on** the definition according to Nienstein et al. (2009) which states that adolescence refers to a developmental period between childhood and adulthood with sub-stages ranging from 12 to 24 years depending on gender (Curtis, 2015). For this study an adolescent meant a secondary school student within the age range of 12 to 21 years. In addition to the quantitative sample, 14 participants were purposively selected for qualitative data collection and they included two head teachers, four class teachers two compassion workers, and 6 adolescents. The sample size for the study was a total of 524 participants for both qualitative and quantitative data collection. The rationale for selecting South-western Uganda, particularly Kabale district was because it is one of the most highly populated rural areas in Uganda, with the majority of youth exposed to poverty-related adversity which attracts NGOs that support quality education access for children and adolescents in the region (Nyakato et al., 2021). This study is among the first studies to address achievement goal orientation as a function of gender and compassion support among secondary school adolescents in South-western Uganda.

Research Instrument

Demographic information concerning participants' gender and compassion support beneficiary was collected. The 2 x 2 Achievement Goal Questionnaire-Revised (AGQ-R) developed by Elliot and Murayama in 2008 was used in the investigation (Rosas, 2015). The 12 elements in the 2 x 2 AGQ-R were broken down into four subscales (mastery approach, mastery avoidance, performance approach and performance-avoidance). Three items on a 5-point rating scale, one for "strongly disagree" and five for "strongly agree," were measured for each sub-scale. A pilot study was conducted in November 2022 among 89 adolescents' students in Southwestern Uganda and results facilitated the determination of Cronbach Alpha Coefficient and (content validity index) CVI to ensure that data collection tools were reliable and valid. This enabled proper contextualization of data collection tools as explained in the following sections.

Reliability of Quantitative Data Collection Tool

The instrument was pre-tested in schools that were not part of the main data collection. Cronbach Alpha Coefficients for the achievement goals orientation questionnaire was Achievement goal orientation types was; mastery approach achievement goals orientation $a = 0.80$, mastery avoidance achievement goals orientation $a = .75$, performance approach achievement goals orientation $a = 0.85$ and performance avoidance achievement goals orientation $a = 0.70$. Therefore, the instruments were suitable and reliable for data collection. Cronbach Alpha Coefficients for self-efficacy questionnaire was $a = .78$ while academic engagement questionnaire was $a = .86$.

Reliability of Qualitative Data Collection Tool

Trustworthiness and reliability of the in-depth interview guides for a subset of adolescents and key informants' interview guide ensured to attain high-quality data that could be used to make informed decisions or recommendations. Before the actual interviews were conducted, a pilot testing the interview guides with a small sample

of participants was done to identify potential issues or challenges. Pilot testing helped in refining the questions and prompts to ensure they were clear, understandable and meaningful to the participants. Interviewers were trained to ensure that the interview guides were administered consistently and that the questions were asked in a neutral and non-leading way. All participants were asked the same questions, in the same order, and in the same way to avoid variability in responses. The trustworthiness and reliability of the qualitative aspect of this study is well explained in the data management section.

Validity

The research instruments were validated. The content validity index (CVI) was established in this study after the adopted standardised questionnaires were pre-tested. This was done to ensure that the questionnaires accurately described and quantified what they were supposed to measure in the context of this study. The study's Content Validity Index (CVI) for achievement goals orientation, self-efficacy, and academic engagement was at 1.00. This implied that all items that were adopted to measure constructs under this study were maintained. Therefore, the instrument was deemed valid as suggested by the previous researchers. The study's Content Validity Index (CVI) for achievement goal orientation, self-efficacy, and academic engagement was 1.00. This implied that all items that were adapted to measure constructs under this study were maintained. Therefore, the instrument was deemed valid as suggested by the previous researchers (Amin, 2005). In addition, three experts were consulted regarding the appropriateness and the items ability to measure what they were intended to measure in the context of adolescent students within low resource education setting.

Data Collection Procedure

The researchers were introduced to and sought permission from secondary schools' administrators. The researcher then obtained contact information including names of classroom

teachers for classes where individual participants were to be selected. A verbal explanation about the aim of the study was given to the school administrators and they signed consent forms as caregivers of adolescents below eighteen years. Adolescents who were eighteen years and older signed an informed consent form. Following the directions from school administrators, classes were visited for individual participant sampling. The researchers administered questionnaires to participants after they had understood and had no queries concerning the study. Participants were assured of confidentiality. To ensure anonymity, codes were generated to represent participants and their schools to avoid direct identification.

To collect qualitative data, appointments were made with the selected key informants one by one to set the meeting dates. In-depth qualitative information concerning what influences achievement goal orientation adoption among adolescent students in secondary schools was audio recorded, transcribed and thematically analysed. All data collection tools were in English and interviews were conducted in English too because all participants were conversant with the language as it is the official mode of instruction for most subjects in Ugandan schools right from the time a child enrolls for formal education.

Ethical Consideration

The Uganda National Council for Science and Technology (UNCST) and the Mbarara University of Science and Technology Research Ethics Committee (MUST-REC) granted the researchers ethical clearance (refs: SS1562ES and MUST-2022-620) respectively. We collected the signed informed consent (signature) of administrators for adolescents below 18 years of age and for adolescents who were 18 years and older. Adolescents under the age of 18 were specifically asked to sign an informed assent. Participants received guarantees of confidentiality and the freedom to omit or skip certain questions if doing so made them uncomfortable. Two bars of soap were given to each participant as compensation for their time during the interview.

Data Analysis

Quantitative Data

The derived quantitative data was coded for statistical analysis using the Statistical Package for the Social Sciences (SPSS), Version 20. Data analysis was done using descriptive statistics including means, the Mann-Whitney-U test for differences, and regression models. Levels of achievement goal orientation and demographic characteristics were reported using descriptive statistical procedures. The Mann-Whitney- U test was used to determine whether there is evidence of differences in achievement goal orientation adoption based on gender and compassion support. The study aimed to determine whether there were differences in achievement goal orientation adoption based on gender and compassion support, which involved the comparison of two independent groups. The Mann-Whitney U test was suitable for this type of analysis since the number of participants in each category were not uniformly distributed. In addition, a linear regression analysis was conducted to assess the impact of gender and compassion support on the achievement of the orientation adoption objective.

Qualitative Data

In addition to the quantitative analysis, qualitative data was analysed to facilitate triangulation of the study findings. Thematic analysis was done to analyse data generated from key informant interviews.

Transcription of audio recorded data was without any pre-editing. The goal was to become completely absorbed in the data. The data sets were read and amended multiple times, and what emerged was noted. The scripts with noteworthy points and expressions for the study were given special codes on the face page for follow up and track record. The marker and highlighter were employed to emphasise catch points in the scripts. To facilitate simple access to such demarcated places, early concepts for codes were marked. Meanwhile coding was done manually through hard copies of the transcripts with pens and

highlighters. The researcher chose manual thematic analysis over automated software to gain a deeper understanding of the data. The process involved transcribing audio recordings, multiple readings, open coding, and iterative theme development. Manual analysis allowed the researcher to exercise judgment, creativity, and intuition, leading to the identification of novel themes. This approach was more transparent and easier to audit, enhancing the credibility and trustworthiness of the research findings. The manual process of data display, coding, and theme construction facilitated a comprehensive engagement with the data, which would not have been possible with automated techniques.

After coding, the clustered texts were studied to develop a pattern that existed among them. This was intended to generate and develop a flow of themes. The main themes were created in an iterative manner by grouping codes to create typologies while maintaining a trail of the source transcripts. These were later paraphrased in a way that remained focused on the research question, study problem, and the main themes. This was to ensure coherence in the relationship between themes. Narratives from the key informant interviews yielded to a number of themes emerging from patterns explaining what might influence adolescents' engagement in academic work which actually expresses achievement goal orientation as shown in the results section.

Results

This section presents results as obtained from the field and analysed according to study objectives. Results the general description of achievement goal orientation adoption, Mann-Whitney Test for differences in achievement goal orientation (ago) by gender of adolescent students, Mann-Whitney Test for differences in achievement goal orientation (ago) by compassion international support and regression model for effects of student gender and compassion support on approach achievement goal orientation (mastery and performance).

Demographic Characteristics

Data set collected from 510 participants included 231 (45.29%) males and 279(54.7%) females and of these; 188(36.86%) were Compassion supported and 322 (63.13%) were non-

Compassion-supported adolescents. In addition to the 510 participants from quantitative data collection, 14 key informant interviews were conducted among two compassion officers, two head teachers, four teachers and six adolescent students

Table 1: Descriptive Statistics of Achievement Goal Orientation (AGO) Influenced by Gender and Compassion Support

AGO Constructs	Categories	Gender of respondents		Compassion Support		Total
		Male (%)	Female (%)	Beneficiary (%)	Non-beneficiary (%)	
MAP	Low	20(48.8)	21(51.2)	14(34.1)	27(65.9)	41
	Moderate	65(55.1)	53(44.9)	32(27.1)	86(72.9)	118
	High	146(41.6)	205(58.4)	142(40.5)	209(59.5)	351
PAP	Low	22(56.4)	17(43.6)	10(25.6)	29(74.4)	39
	Moderate	67(48.9)	70(51.1)	42(30.7)	95(69.3)	137
	High	142(42.5)	192(57.5)	136(40.7)	198(59.3)	334
MAV	Low	69(46.6)	79(53.4)	47(31.8)	101(68.2)	148
	Moderate	92(45.8)	109(54.2)	65(32.3)	136(67.7)	201
	High	70(43.5)	91(56.5)	76(47.2)	85(52.8)	161
PAV	Low	24(53.3)	21(46.7)	19(42.2)	26(57.8)	45
	Moderate	71(51.8)	66(48.2)	42(30.7)	95(69.3)	137
	High	136(41.5)	192(58.5)	127(38.7)	201(61.3)	328

Note. AGO=Achievement Goal Orientation, MAP= Mastery approach goal orientation, PAP= Performance approach goal orientation, MAV= Mastery avoidance goal orientation, PAV= Performance avoidance goal orientation.

Table 2: Mann-Whitney Test for Differences in Achievement Goal Orientation (AGO) by gender of Adolescent Students

AGO Sub Scale	Gender of respondents	N	Mean Rank	Sum of Ranks	P
MAP	Male	231	241.83	55862.50	.019
	Female	279	266.82	74442.50	
	Total	510			
PAP	Male	231	244.39	56453.00	.064
	Female	279	264.70	73852.00	
	Total	510			
MAV	Male	231	251.73	58148.50	.575
	Female	279	258.63	72156.50	
	Total	510			
PAV	Male	231	241.43	55770.00	.020
	Female	279	267.15	74535.00	
	Total	510			

Note. AGO=Achievement Goal Orientation, MAP= Mastery Approach Goal Orientation, PAP= Performance Approach Goal Orientation, MAV= Mastery Avoidance Goal Orientation, PAV= Performance Avoidance Goal Orientation

Results in Table 1 show that a high proportion of female participants adopted mastery approach goal orientation (MAP) 205(58.4) and performance approach goal orientation (PAP) 192(57.5%) compared to males 146(41.6%) and 142(42.5%) respectively. The same trend is observed on the adoption of mastery avoidance goal orientation (MAV) females 91(56.5%) and

males 70(43.5%), and performance-avoidance (PAV) females 192(58.5%) and males 136 (41.5%). Results in Table 1 further indicate that males have the highest proportion of participants with high mastery avoidance goal orientation (MAV) compared to all other goal orientation dimensions.

Results in (Table 2) indicate that there was a statistically significant difference between males and females in mastery approach goal orientation (mean rank = 266.82, $P = .019$) and Performance avoidance goal orientation (mean rank = 267.15, $P = .020$). There was no statistically significant difference in gender and performance approach (PAP) and mastery avoidance (MAV).

Results indicated by the Mann-Whitney Test for Differences in achievement goal orientation (AGO) by gender among adolescent students show a statistically significant difference in mastery approach achievement goal orientation between males and female (see Table 2). Female students were more likely to adopt mastery approach achievement goals orientation (MAP) and performance avoidance goal orientation than their male counterparts. Findings of this study are supported by previous research results which indicated that females were more likely to adopt approach achievement goals orientation than males (Boyd, 2017). Moreover, previous research suggests that students who approach learning with the aim of self enhancement will likely be persistent as they experience difficulty that learning presents (Subaşi, 2020). Findings of this study are consistent with the stereotypes in the Ugandan cultural context which stipulate that female children are meant to perfect their skills in preparation for future roles characterised by

taking care of their children, husbands and any other members of their families. In the process, they develop intrinsic motivation for self-skill enhancement as they strive to master whatever they learn for future transfer. In the Ugandan culture, girls are encouraged to be more cooperative and collaborative as nurturers, which can promote a mastery goals orientation. Boys, on the other hand, are socialized to be more competitive, assertive and bossy which promotes a performance goals orientation and avoidance of any negative feedback.

On the contrary, some research on achievement goal orientation has shown that more boys adopt mastery goal orientation than girls, for example, a study conducted among adolescent students in Kenya discovered that boys were classified as having a mastery approach more than girls (Ng'ang'a, 2018). It is important to note that these gender differences are not always consistent across all studies, and may vary depending on the specific cultural and social context in which the research is conducted.

Results further indicate that while there is a weak difference between males' and females' adoption of performance approach goal orientation (PAP), there are no significant differences in the way both genders adopt performance avoidance achievement goal orientation (PAV). The Ugandan education context focuses on grades as a measure of successful learning which determines positions in class and consequently employability. This explains why both females and males equally adopt performance approach goals. The contradictions in research findings provide a basis for context-based intervention meant to enhance goal setting skills.

Table 3: Mann-Whitney Test for Differences in Achievement Goal Orientation (AGO) by Compassion Support among Adolescent Students

AGO Categories	Compassion Support Beneficiaries	N	Mean Rank	Sum of Ranks	P-Value
MAP	Yes	188	271.70	51080.00	.020
	No	322	246.04	79225.00	
	Total	510			
PAP	Yes	188	273.68	51452.00	.011
	No	322	244.89	78853.00	
	Total	510			
MAV	Yes	188	278.55	52366.50	.004
	No	322	242.05	77938.50	
	Total	510			
PAV	Yes	188	261.86	49230.50	.378
	No	322	251.78	81074.50	
	Total	510			

AGO=Achievement Goal Orientation, MAP= Mastery approach goal orientation, PAP= Performance approach goal orientation, MAV= Mastery avoidance goal orientation, Performance avoidance goal orientation.

Results in Table 3 indicate that there was a statistically significant difference between compassion support beneficiaries and non-beneficiaries in Mastery approach goal orientation (MAP) at (mean rank, 271.70, $P = 0.020$), Performance approach goal orientation (PAP) at (mean rank, 273.68, $P = 0.011$) and Mastery avoidance goal orientation (MAV) at (mean rank, 278.55, $P = 0.004$). There was no statistically significant difference in compassion support and Performance avoidance goal orientation (PAV). These study findings are consistent with results of an investigation conducted on French Canadian adolescents which revealed that their perception of emotional support from teachers had a significant impact on their endorsement of mastery achievement goal orientation, particularly when they perceived themselves as competent (Smith et al., 2022).

The adoption of achievement goals orientation among beneficiaries of compassion support can be attributed to the multifaceted nature of the support provided, which encompasses not only financial assistance but also mentorship programs, medical services, emotional support, and goals-setting skills. Qualitative narratives also revealed that

while compassion support beneficiaries have a desire to master academic skills in preparation for high paying job careers in order to break the poverty chains in their families which could explain their adoption of mastery approach achievement goal orientation. Compassion support beneficiaries are also rewarded by their supporters for surpassing their peers in academic performance. For instance, the most outstanding students in the class receive sponsorship to pursue their education in top-rated institutions across the country. This could account for their inclination towards performance approach goals. Similar to previous research conducted among American high school students who exhibited a high degree of endorsement towards PAP due to their intense aspiration to surpass their peers, which was driven by familial expectations and internal pressure to meet parental anticipations (Kim et al., 2020). Such motivational sources present with learning anxiety and surface engagement in learning since student main goal is to fulfil their parents/guardians' expectations hence adoption of mastery avoidance goal orientation. Students need to be given the liberty to set their learning goals as they get prepared for self-reliance as responsible citizens ready to solve life challenges.

Table 4: Regression Model to Examine Effect of Student Gender and Compassion Support on Mastery Approach Achievement Goal Orientation (MAP)

Model	Coefficients			T	P
	Unstandardized Coefficients	Standardized Coefficients			
	B	Std. Error	Beta		
(Constant)	3.757	.125		30.102	.000
MAP Gender of Respondents	.101	.078	.058	1.299	.194
Compassion Support beneficiary	.141	.080	.079	1.761	.079

a. Dependent Variable: MAP

R = .106, R² = .011, F= 2.875, P =.05

Note. MAP= Mastery Approach Achievement Goal Orientation.

Results in Table 4 indicate that variation in student gender and compassion support is associated with achievement goal orientation. Being female or compassion support beneficiary is a factor of AGO endorsement with a multiple correlation coefficient of R = .106, R² = .011 meaning that gender and compassion support explained 1.1% of the variance in the mastery approach goals (MAP). The data fitted the model significantly (F = 5.84, P =.016). From the regression model (Table 4), a unit change in gender from a male to female or from compassion support beneficiary to non-beneficiary resulted in a 0.11 change in mastery approach goals (MAP) (B= .141, t= 1.761, p= .05). This implies that being female and or compassion support beneficiary was more inclined to adopting mastery approach goals than being male and or no-beneficiary. This means that social economic support can facilitate self-skill enhancement goals among adolescent students in low-education resource settings. Results of this study are supported by previous research done among French Canadian adolescents which found out that adolescents perceptions of their teachers' emotional support influenced their endorsement of mastery achievement goal orientation especially when they felt competent (Smith et al., 2022). The fact that compassion support does not only provide students with finances but also mentorship programs, medical services, emotional support and goal setting skills explains why compassion support beneficiaries highly endorse mastery approach achievement goal orientation (Mugisha, 2021).

These findings are strengthened by qualitative narratives by elaborating what influences variations in achievement goal adoption among adolescent students in Southwestern Uganda as depicted in participants' narratives gave regarding support offered by compassion international projects;

Future Career and Employability

'Yes, compassion support beneficiaries work hard to master the taught content because they have no parents and come from poor and challenging backgrounds which force them to work hard and achieve their goals for a better future (IS/KI/NCB/01, adolescent, non-compassion support beneficiary).

'All my school fees are paid by Compassion International because I come from a very poor background. I engage in academic work to do a good course in future, get a job and look after our family in future' (IS/KI/NCB/05, adolescent, compassion support beneficiary).

Goal setting training: One of the key participants said compassion support beneficiaries are trained to set goals which motivate them to adopt mastery approach achievement goal orientation.

'They are motivated by a tool they fill every once or twice a year called my life for tomorrow, we have now called it life planning tool. So, in this tool a student writes the future career he wishes to pursue and also objectives towards the future careers. But in this life

planning tool, we don't only emphasize career but also spiritual, socio emotional and physical aspects of a child's life. We also have child development progress report (CDPR... we assess a child's development in accordance with education attainment and the child knows that on my academics, I should be doing this at this age' (IS/KI/CW/01, compassion worker).

goals orientation as depicted by the following statement;

'We make sure that each child is attached to a mentor who keeps advising them. There is an alumni day, when we call the people who passed through compassion to come and visit project centers and tell the beneficiaries how they used to do things to inspire them. They meet multiple people of high profile who come to teach them about discipleship, sexual purity or skill, these people inspire them' (IS/KI/CW/02, compassion worker).

Mentorship was also found to be one of the most important aspects that influence students' endorsement of mastery approach achievement

Table 5: Regression Model for Effects of Student Gender, Compassion Support on Performance Approach Achievement Goal Orientation

Model	Coefficients ^a				t	Sig.
	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta			
(Constant)	3.806	.122			31.285	.000
PAP Gender of Respondents	.058	.076	.034		.769	.442
Compassion Support Beneficiaries	.193	.078	.110		2.468	.014

a. Dependent Variable: PAP

R = .121, R² = .015, F= 3.781, P =.023, Note. PAP=Performance approach achievement goal orientation.

Results in Table 5 indicate that gender or compassion support had a strong relationship with performance approach goal orientation (PAP) at (R = .121, R² = 0.015 which implies that being a female compassion beneficiary explained 1.5% of the variance in the performance approach goal orientation (PAP). The data moderately fitted the model (F = 3.781, P =.023). From the regression model (Table 5), a unit increase in support by compassion, that is moving from being a compassion beneficiary to non- beneficiary, resulted in a 0.015-unit reduction in performance approach goal orientation (PAP) at (B= .193, t= 2.468, p= .023). This implies that when an adolescent student was a female supported by compassion, she was likely to adopt the Performance approach achievement goal orientation.

adoption. Compassion support beneficiaries were more inclined to adopting performance approach goals (PAP) than non-beneficiaries. This is consistent with previous research which revealed that financial support had a positive impact on students' achievement goal orientation adoption (Lin, 2016). Adoption of performance approach goal orientation may be linked to students' feeling of pressure to succeed academically in order to improve their future prospects of improving their low-income families. These findings about performance approach goals orientation adoption are supported by earlier research done among American high school students who highly endorsed performance approach goals (PAP), with a strong desire to outperform their counterparts due to family expectations and internal high pressure to fulfill their parents expectations (Kim et al., 2020). The aforementioned scholarly findings are in agreement with our previous research findings regarding compassion international support and

Linear regression results in Tables 5 indicated that being a compassion support beneficiary was a factor of performance approach goal orientation

achievement goal orientation preferences among adolescent students in Uganda (Ndyareeba et al., 2024). The qualitative narratives attest to these quantitative results by offering an explanation about what influences significant differences in adoption of performance approach achievement goals orientation among compassion support beneficiaries and Non-beneficiaries in southwestern Uganda. Adoption of performance approach achievement goal orientation can be linked to external rewards given to compassion support beneficiaries as expressed in the following narratives;

'My classmates mostly the compassion supported have been promised that if they perform well, they will be supported at the university and therefore they work hard and engage better to win others' (IS/KI/NCB/01, adolescent, non-compassion support beneficiary).

'...While awarding marks depending on their performance, you see a student scared about their parents and guardians because of poor

performance in comparison with their classmates' (IS/KI/T/01 at a private school.

'Compassion support beneficiaries are inspired by the sponsors themselves, as they write letters seeking to know the students' performance. This makes them to work hard such that they put something good in the next letter... we make sure that we pay a hundred percent school fees for the best performers and they are motivated because they know that they can reach at any level of education despite their poor backgrounds (IS/KI/CW/01). 'Compassion gives in scholarships to the best academic performers, for example we have a beneficiary at one of the best schools in Kabale district and another one is doing a bachelor of Laws at one of the accredited universities in southwestern Uganda region and all these inspire the young children to work hard and be the best performers in class' (IS/KI/CW/02, compassion worker).

Table 6: Regression Model on Effect of Student Gender and Compassion Support on Mastery Avoidance Achievement Goal Orientation (MAV)

Model		Coefficients ^a			T	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
MAV	(Constant)	3.066	.157		19.522	.000
	Gender of Respondents	-.032	.098	-.015	-.331	.741
	Compassion support Beneficiaries	.307	.101	.136	3.044	.002

a. Dependent Variable: MAV

R = .134, R² = .018, F= 4.652, P = .010: Note. MAV= Mastery avoidance goal orientation.

Results in Table 6 indicate that gender and compassion support explained 1.8% of the variance in the mastery avoidant achievement goal orientation. The model had a significant fit to the data (F= 4.652, P = .010). From the regression model (Table 6), a unit increase in compassion, that is moving from being a compassion beneficiary to non-beneficiary resulted in a 0.018-unit reduction in mastery avoidance goal orientation (MAV) (B= .307, t= 3.044, p = .010). This implies that female compassion-supported adolescents were more

likely to adopt mastery avoidance achievement goals (MAV) than boys and non-supported adolescents.

The study findings resonate with the argument advanced by Subasi who found out that avoidance goals were positively correlated with task value and academic efficacy among Korean students (Subaşi, 2020). The findings among Korean students affirm the fact that in countries with collective cultures like Uganda, avoiding negative consequences is very important. Students avoid

being misunderstood by society around them and make effort to successfully achieve on a given academic task by avoiding those they deem difficult as they concentrate on tasks, they deem

possible to avoid being ridiculed. The study findings present practical implications for effective context-specific interventions to enhance positive achievement goals.

Table 7: Regression Model to Examine Effect of Student Gender, Compassion Support on Performance Avoidance Achievement Goal Orientation (PAV)

Model		Coefficients ^a			T	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
PAV	(Constant)	3.773	.131		28.785	.000
	Gender of Respondents	.094	.082	.052	1.149	.251
	Compassion Support Beneficiaries	.054	.084	.029	.635	.526

a. Dependent Variable: PAV

R = .063, R² = .004, F= 1.018, P =.362: PAV= Performance avoidance goal orientation.

Results in Table 7 indicted that gender and Compassion support do not explain variance in performance avoidance achievement goal orientation. There was no statistically significant difference in compassion support and performance avoidance achievement goal orientation. Though some adolescents adopted performance avoidance achievement goal orientation, their choice was neither influenced by gender nor compassion support. The qualitative findings revealed that teachers negative behavior was a major factor that influenced adoption of performance avoidance goal orientation despite its being linked to negative academic outcomes. One of the participants lamented as follows;

Yes, some teachers are not supportive and are unfriendly so students avoid them. Subjects that I fail most are avoided. There are some teachers who always abuse us and harass us. ...For example, some teachers are not engaged in helping students who fail certain subjects and they end up avoiding them. ... there is one of the students who used to fail and when the teacher embarrassed him before the whole class, he stopped to regularly attend that very subject and the teacher made the student to drop out of school (IS/KI/NCB/01, non- beneficiary adolescent).

These qualitative findings resonate with findings documented by one of the recent meta-analysis of

studies done on factors influencing academic achievement goals and found out that teacher-student relationship was one of the major factors (Li & Xue, 2023). This implies that students are likely to have a desire to master content taught by teachers who provide positive feedback, encourages students and attend to their questions.

Conclusion

This study concludes that gender and compassion support influence adoption of achievement goal orientation among adolescents in secondary schools in southwestern Uganda. Females and compassion support beneficiaries adopted mastery approach achievement goal orientation and are therefore more likely to experience academic success and lifelong learning.

The study concludes that context-specific and culturally entrenched factors influence achievement goal orientation adoption variations among adolescent students in secondary schools. Compassion support system encourages their beneficiaries to adopt approach goals orientation through provision of mentorship opportunities and goal setting skills training. Compassion International support beneficiaries also adopted mastery approach goals to master content and get better jobs to enable them change the economic status of their families. Both compassion support beneficiaries and non- beneficiaries attribute their

adoption of performance approach goals to external rewards and future employability, teacher-student relationship, parents'/guardians' expectations.

Whereas in other contexts, performance approach achievement goal orientation is linked to surface learning and poor academic outcomes (Soyer & Kirikkanat, 2019), in the context of low resource education contexts like Uganda, extrinsic motivation through external rewards directed towards further education pursuit result in higher academic engagement and consequently positive education outcomes.

Recommendation for Education Stakeholders

This study recommends that interventions focusing on achievement goal orientation for education success and lifelong learning give attention to gender differences giving specific attention strategies that encourage male students to embrace mastery approach achievement goals for deeper learning and transferring knowledge to real life situations.

We recommend that teachers, parents and all stakeholders adopt support system implemented by compassion international like mentorship, goal setting training, positive feedback and confidence building to help learners focus on self-skill enhancement for lifelong learning outcomes. School administrators could adapt strategies from compassion projects support system to create conducive environment that enhances learners' competence since compassion international support had a significant influence on students' adoption of mastery approach achievement goal orientation. It is the responsibility of school administrators to ensure that teachers have access to ongoing professional development opportunities that will enhance their capacity to form healthy connections with their students, provide mentorship and carryout goal setting training to students despite their gender or compassion support.

Recommendations for Further Research

Interventions aimed at improving achievement goal orientation among adolescents in low resource education settings need to focus on parental involvement and gender role restructuring in order to harmonise gender-based differences (resulting from cultural bias) in achievement goal orientation adoption.

Strengthening parent-child communication through promotion of open and supportive communication between parents and their children, allowing adolescents to freely discuss their academic goals, challenges, and aspirations. Parents can further be educated on the potential cultural biases that may influence their expectations and treatment of their children based on gender, and encourage them to adopt more equitable practices like set high academic expectations for their children, regardless of gender.

School stake holders may focus on gender role restructuring for example challenging stereotypical gender roles through implementation of programs or workshops that challenge traditional gender norms and stereotypes, encouraging both boys and girls to embrace a wide range of life skills and responsibilities since they translate into engagement in academics self-skill enhancement. School stakeholders could also collaborate with policymakers and education authorities to advocate for policies that promote gender equity in education, such as ensuring equal access to resources, opportunities, and support for both male and female students. The sample in this study was limited to schools that collaborate with compassion international projects which do not fully represent all schools in Uganda. Future research could look into including a diverse sample such as children and adolescents within rural and Urban schools receiving support from diverse non-governmental organisations that support education access for students with poverty related adversity experiences.

REFERENCES

- Alhadabi, & Karpinski. (2020). Grit, self-efficacy, achievement orientation goals, and academic performance in University students. *International Journal of Adolescence and Youth*, 25(1), 519–535. <https://doi.org/10.1080/02673843.2019.1679202>
- Boyd, A. M. (2017). *An examination of goal orientation between genders – an exploratory study*. 1–38.
- Bukhari, S. A. R. (2021). Sample Size Determination Using Krejcie and Morgan Table. *Kenya Projects Organization (KENPRO), February*, 607–610. <https://doi.org/10.13140/RG.2.2.11445.19687>
- Duchesne, S., Larose, S., & Feng, B. (2019). Achievement Goals and Engagement With Academic Work in Early High School: Does Seeking Help From Teachers Matter? *Journal of Early Adolescence*, 39(2), 222–252. <https://doi.org/10.1177/0272431617737626>
- Elliot, A. J., & Harackiewicz, J. M. (2015). *Approach and Avoidance Achievement Goals and Intrinsic Motivation: A Mediation Analysis*. February. <https://doi.org/10.1037/0022-3514.70.3.461>
- Elliot, A. J., & McGregor, H. A. (2001). A 2 × 2 achievement goal framework. In *Journal of Personality and Social Psychology* (Vol. 80, Issue 3, pp. 501–519). <https://doi.org/10.1037/0022-3514.80.3.501>
- Elliot, A. J., Murayama, K., & Pekrun, R. (2011). A 3 × 2 achievement goal model. *Journal of Educational Psychology*, 103(3), 632–648. <https://doi.org/10.1037/a0023952>
- Harackiewicz, J. M., & Elliot, A. J. (1993). Achievement Goals and Intrinsic Motivation. *Journal of Personality and Social Psychology*, 65(5), 904–915. <https://doi.org/10.1037/0022-3514.65.5.904>
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33(2–3), 61–83. <https://doi.org/10.1017/S0140525X0999152X>
- Ileri, A. M., Mwangi, C. N., Mwaniki, E. W., & Wambugu, K. (2021). *Cognitive Psychology Achievement goal orientations as predictors of academic achievement among secondary school students in embu county , kenya*. 2020. <https://doi.org/10.35248/2329-8901.19.7.215>
- Kim, J. I., de Long, S. P. A., Gorelik, W., Penwell, K., Donovan, C., & Chung, H. (2020). Family orientation and achievement goal orientations among the children of immigrant and non-immigrant families. *International Journal of Educational Psychology*, 9(2), 132–160. <https://doi.org/10.17583/ijep.2020.4422>
- Lin, C.-H. (2016). Examining the Effects of Financial Aid on Student Persistence in Taiwanese Higher Education. *International Education Studies*, 9(8), 36. <https://doi.org/10.5539/ies.v9n8p36>
- Lochbaum, M., Zazo, R., Çetinkalp, Z. K., Wright, T., Graham, K. A., & Kontinen, N. (2016). A meta-analytic review of achievement goal orientation correlates in competitive sport: A follow-up to Lochbaum et al. (2016). *Kinesiology*, 48(2), 159–173. <https://doi.org/10.26582/k.48.2.15>
- Mugisha. (2021). *Compassion international's contribution to education in uganda*.
- Nazarieh, M. (2015). A brief history of achievement goals orientations theory and its development. *BEST: Journal of Humanities, Arts, Medicine and Sciences*, 1(2), 49–58.
- Ndyareeba, E., Biirah, J., & Kibedi, H. K. (2024). *East African Journal of Education Studies Achievement of Goal Orientation and Academic Engagement among Adolescents in Southwestern Uganda*. 7(2), 1–18. <https://doi.org/10.37284/eajes.7.2.1848>

- Ng'ang'a, M. & D. (2018). *Relationship Between Achievement Goal Orientation and Academic Achievement Among Form Three Students in Kiambu County, Kenya 1 Maria Wacera Ng'ang'a (Corresponding Author)*. 6(4), 53–68.
- NSDFA. (2018). Accountability report. *Alzheimer Society of Canada*, 12. http://www.snb.ch/en/mmr/reference/annrep_2012_rechenschaft2/source
- Nyakato, V. N., Achen, C., Chambers, D., Kaziga, R., Ogunnaya, Z., Wright, M., & Kools, S. (2021). Very young adolescent perceptions of growing up in rural southwest uganda: Influences on sexual development and behavior. *African Journal of Reproductive Health*, 25(2), 50–64. <https://doi.org/10.29063/ajrh2021/v25i2.5>
- Poortvliet, M. (2020). Encyclopedia of Personality and Individual Differences. *Encyclopedia of Personality and Individual Differences*, January 2016. <https://doi.org/10.1007/978-3-319-28099-8>
- Rosas. (2015). *Validation of the Achievement Goal Questionnaire – Revised in Argentinean university students Research*. 8(1), 10–23.
- Şahin, E., & Kürkçü, R. (2016). *Journal of Education and Practice Sex and Age Differences in Achievement Goal Orientations in Turkish Adolescents*. 7(27), 149–156. www.iiste.org
- Smith, J., Nadeau, M. F., Archambault, I., Guimond, F. A., St-Amand, J., Fitzpatrick, C., & Gagnon, M. (2022). Linking High School Students' Achievement Goal Orientations With Their Competence Beliefs and Their Perception of Teachers' Emotional Support During the COVID-19 Pandemic. *Frontiers in Education*, 7(March), 1–7. <https://doi.org/10.3389/educ.2022.762766>
- Subaşi, M. (2020). Modeling the Relationships among Mastery Goal Orientations, Positive Coping Strategy, and Motivational Beliefs in Science. *Science Education International*, 31(4), 328–333. <https://doi.org/10.33828/sei.v31.i4.1>
- Üztemur, S. (2020). Achievement goals and learning approaches in the context of social studies teaching: Comparative analysis of 3x2 and 2x2 models. *Participatory Educational Research*, 7(2), 1–18. <https://doi.org/10.17275/per.20.16.7.2>
- Wang, M.-T., & Degol, J. L. (2017). Gender Gap in Science, Technology, Engineering, and Mathematics (STEM): Current Knowledge, Implications for Practice, Policy, and Future Directions. *Educational Psychology Review*, 29(1), 119–140. <https://doi.org/10.1007/s10648-015-9355-x>.Gender